

1634

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): PADGETT et al

Serial No.: 10/066,390

Filed: 2/1/2002

Title: **Method of Increasing
Complementarity in a Heteroduplex**

Attorney Docket No.: P-LG4878

Mail Stop DD
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450



Examiner: Fredman, Jeffrey N.

Group Art Unit: 1634

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Sir:

This Supplemental Information Disclosure Statement is submitted under 37 CFR 1.97(b) (before mailing date of first office action on the merits).

Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

The relevance of the attached references is that this is the closest art of which Applicant is aware. Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted,

LARGE SCALE BIOLOGY CORPORATION

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop DD, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date of Deposit: 11 June 2003

Typed Name: Thomas Gallegos

Signature: Thomas Gallegos

Thomas Gallegos
Thomas Gallegos, Sr. Director, Intellectual Property
Attorney/Agent for Applicant(s)
Reg. No. 32,692

Date: 11 June 2003

Telephone No.: (707) 446-5501

Complete if Known

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

2

Application Number	10/066,390
Filing Date	2/1/2002
First Named Inventor	Padgett et al.
Art Unit	1634
Examiner Name	Fredman, J.N.
Attorney Docket Number	P-LG4878

[illegible][illegible]Examiner
Signature

Date	
Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant. ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the WIPO Standard ST.36 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO

**SUPPLEMENTAL
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

Application Number	10/066,390
Filing Date	2/1/2002
First Named Inventor	Padgett et al.
Group Art Unit	1634
Examiner Name	Fredman, J.N.
Attorney Docket Number	P-LG4878

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite ₁ No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		ABASTADO, et al., "Processing of complex heteroduplexes in <i>Escherichia coli</i> and Cos-1 monkey cells", <i>Proc. Natl. Acad. Sci. USA</i> , September 1984, Vol. 81, pp. 5792-5796	
		CAMI, et al., "Correction of complex heteroduplexes made of mouse H-2 gene sequences in <i>Escherichia coli</i> K-12", <i>Proc. Natl. Acad. Sci. USA</i> , January 1984, Vol. 81, pp. 503-507	
		CHANG, et al., "Recombination following transformation of <i>Escherichia coli</i> by heteroduplex plasmid DNA molecules", <i>Gene</i> , 1984, Vol. 29, pp. 255-261, Elsevier	
		COTTON, "Slowly but surely towards better scanning for mutations", <i>TIG</i> , February 1997, Vol. 13, No. 2, pp. 43-46, Elsevier Science Ltd.	
		JOYCE, "Directed Molecular Evolution", <i>Scientific American</i> , December 1992, pp. 90-97	
		KULINSKI, et al., "CEL I Enzymatic Mutation Detection Assay", <i>Biotechniques</i> , July 2000, Vol. 29, pp. 44-48	
		LAHUE, et al., "Requirement for d(GATC) sequences in <i>Escherichia coli</i> mutHLS mismatch correction", <i>Proc. Natl. Acad. Sci. USA</i> , March 1987, Vol. 84, pp. 1482-1486	
		MODRICH, "Strand-specific Mismatch Repair in Mammalian Cells", <i>The Journal of Biological Chemistry</i> , October 3, 1997, Vol. 272, No. 4, pp. 24727-24730, The American Society of for Biochemistry and Molecular Biology, Inc., Bethesda, MD	
		OLEYKOWSKI, et al., "Mutation detection using a novel plant endonuclease", <i>Nucleic Acids Research</i> , 1998, Vol. 26, No. 20, pp. 4597-4602, Oxford University Press, United Kingdom	
		OLEYKOWSKI, et al., "Incision at Nucleotide Insertions/Deletions and Base Pair Mismatches by the SP Nuclease of Spinach", <i>Biochemistry</i> , 1999, Vol. 38, pp. 2200-2205, American Chemical Society, Columbus, OH	
		ROBERTSON, "Directed evolution patent could have major impact", <i>Nature Biotechnology</i> , May 1998, Vol. 16, p. 411	
		SOLARO, et al., "Endonuclease VII of Phage T4 Triggers Mismatch Correction <i>in Vitro</i> ", <i>J. Mol. Biol.</i> , 1993, Vol. 230, pp. 868-877, Academic Press Limited	
		VOLKOV, et al., "Random Chimeragenesis by Heteroduplex Recombination", <i>Methods in Enzymology</i> , 2000, Vol. 328, pp. 456-463, Academic Press	
		VOLKOV, et al., "Recombination and chimeragenesis by <i>in vitro</i> heteroduplex formation and <i>in vivo</i> repair", <i>Nucleic Acids Research</i> , 1999, Vol. 27, No. 18, pp. e18 (i-vi), Oxford University Press	
		YANG, et al., "Purification, Cloning, and Characterization of the CEL I Nuclease", <i>Biochemistry</i> , 2000, Vol. 39, pp. 3533-3541, American Chemical Society	

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

transf.

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

To:
CAMPBELL & FLORES LLP
Attn. Wong, James J.
4370 La Jolla Village Drive
7th Floor
San Diego, California 92122
UNITED STATES OF AMERICA

Date of mailing
(day/month/year) 19/12/2002

Applicant's or agent's file reference
FP-LG 5058

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US 02/ 03055

International filing date
(day/month/year) 01/02/2002

Applicant

LARGE SCALE BIOLOGY CORPORATION

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within **20 months** from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Stefanie B}chler

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference FP-LG 5058	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 02/ 03055	International filing date (day/month/year) 01/02/2002	(Earliest) Priority Date (day/month/year) 02/02/2001
Applicant LARGE SCALE BIOLOGY CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☒ contained in the international application in written form.

☒ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

A METHOD OF INCREASING COMPLEMENTARITY IN A HETERODUPLEX POLYNUCLEOTIDE

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/03055

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>SOLARO P C ET AL: "Endonuclease VII of phage T4 triggers mismatch correction in vitro"</p> <p>JOURNAL OF MOLECULAR BIOLOGY, LONDON, GB, vol. 230, 1993, pages 868-877, XP002108749</p> <p>ISSN: 0022-2836</p> <p>cited in the application</p> <p>page 869, right-hand column, paragraph 4</p> <p>-page 870, left-hand column, paragraph 1; figures 5,8</p> <p>page 873, left-hand column, paragraph 2 - paragraph 4</p> <p>page 875, right-hand column, paragraph 2 - paragraph 4</p> <p>-----</p> <p>-/--</p>	2-16,20, 22,26



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

28 November 2002

Date of mailing of the international search report

19/12/2002

Name and mailing address of the ISA

European Patent Office, P.B. 5618 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo.nl,
Fax: (+31-70) 340-3016

Authorized officer

Rutz, B

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 679 522 A (SU SHIN-SAN ET AL) 21 October 1997 (1997-10-21) column 17, line 10-60; example 1; table 3 ---	2,3, 5-12,14, 15
Y	WO 99 29902 A (VOLKOV ALEXANDER; SHAO ZHIXIN ; ARNOLD FRANCES (US); CALIFORNIA INS) 17 June 1999 (1999-06-17) page 17, line 30 -page 18, line 3 page 20, line 24 -page 21, line 2; claim 2 ---	1-65
Y	OLEYKOWSKI C A ET AL: "MUTATION DETECTION USING A NOVEL PLANT ENDONUCLEASE" NUCLEIC ACIDS RESEARCH, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 26, no. 20, 1998, pages 4597-4602, XP002943289 ISSN: 0305-1048 cited in the application page 4601, right-hand column, paragraph 2 -page 4602, right-hand column, paragraph 2 ---	1-65
A	VOLKOV A A ET AL: "Recombination and chimeragenesis by in vitro heteroduplex formation and in vivo repair." NUCLEIC ACIDS RESEARCH. ENGLAND 15 SEP 1999, vol. 27, no. 18, 15 September 1999 (1999-09-15), page e18 XP002222860 ISSN: 1362-4962 cited in the application page E18, right-hand column, paragraph 1; figure 3 ---	
A	OLEYKOWSKI CATHERINE A ET AL: "Incision at nucleotide insertions/deletions and base pair mismatches by the SP nuclease of spinach." BIOCHEMISTRY, vol. 38, no. 7, 16 February 1999 (1999-02-16), pages 2200-2205, XP002222861 ISSN: 0006-2960 cited in the application page 2203, right-hand column, paragraph 2 -page 2204, right-hand column, paragraph 1 ---	
A	US 5 869 245 A (YEUNG ANTHONY T) 9 February 1999 (1999-02-09) column 4, line 1-22; examples 2,3 column 7, line 29 - line 50 column 8, line 36 - line 44 --- -/--	

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/03055

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 96 40902 A (TREVIGEN INC) 19 December 1996 (1996-12-19) page 7, line 5-20 page 8, line 34 -page 9, line 6; figure 5 page 10, line 1-9; figure 10 page 26, line 22 -page 28, line 35; example 5 ---	
A	YANG BING ET AL: "Purification, cloning, and characterization of the CEL I nuclease." BIOCHEMISTRY, vol. 39, no. 13, 4 April 2000 (2000-04-04), pages 3533-3541, XP002222862 ISSN: 0006-2960 cited in the application ---	
E	WO 02 24953 A (BERNSTEIN JEFFREY ;MERCK & CO INC (US); MOORE JEFFREY C (US); MCCA) 28 March 2002 (2002-03-28) page 5, line 15 -page 6, line 26; figures 4-8; examples 3-5 -----	2-16,20, 22, 26-38, 42-45, 51-65

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/03055

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5679522	A	21-10-1997	US 5556750 A	17-09-1996
			AT 198774 T	15-02-2001
			CA 2175490 A1	11-05-1995
			DE 69426608 D1	22-02-2001
			DE 69426608 T2	02-08-2001
			EP 0788555 A1	13-08-1997
			JP 9504437 T	06-05-1997
			WO 9512688 A1	11-05-1995
			US 5861482 A	19-01-1999
			US 5702894 A	30-12-1997
			US 5858754 A	12-01-1999
			US 5459039 A	17-10-1995
			US 6008031 A	28-12-1999
WO 9929902	A	17-06-1999	AU 746786 B2	02-05-2002
			AU 1624199 A	28-06-1999
			CA 2313380 A1	17-06-1999
			EP 1036198 A1	20-09-2000
			JP 2002509697 T	02-04-2002
			WO 9929902 A1	17-06-1999
			US 2002137661 A1	26-09-2002
US 5869245	A	09-02-1999	AU 721493 B2	06-07-2000
			AU 3284597 A	05-01-1998
			EP 0964929 A1	22-12-1999
			JP 2000511774 T	12-09-2000
			WO 9746701 A1	11-12-1997
WO 9640902	A	19-12-1996	US 5656430 A	12-08-1997
			AU 6252796 A	30-12-1996
			EP 0832210 A1	01-04-1998
			JP 11506932 T	22-06-1999
			WO 9640902 A1	19-12-1996
			US 5763178 A	09-06-1998
WO 0224953	A	28-03-2002	WO 0224953 A1	28-03-2002